

JANUARY 12, 2020: THREE YEAR

Dear customers and friends,

Today marks 3 years that I have been in business through Forecast LLC, and it was another great year. I'm continuing to enjoy collaborating with passionate people on interesting projects.

Fat Bike Skis' sales are growing, and we are working on upgrades to improve performance and make it easier to use. I helped Weaver Wind Energy develop a computer simulation to better understand the active furling system of their small wind turbine, with the goals of increasing energy production and surviving strong winds. I continued to provide guidance and design assistance to a UVM researcher who is monitoring wildlife sounds with a solar-powered, mobile-phone-based remote data acquisition system.

Last year's sponsorship of the LaunchVT pitch competition formed excellent connections. This year I was able to help one of last year's winners, Northview Weather, with an exciting initiative that uses their state-of-the-art weather forecasting in a new market. This year's LaunchVT sponsorship resulted in me helping StrollRunner to improve their product and get it to market. We started by defining the strengths and weaknesses of the current product, and we are eliminating the weaknesses while retaining the strengths.

Thanks to an introduction from a Vermont-based manufacturer, Weltha LLC asked me to take their product from the conceptual prototype stage to a production-ready state. Over the past several months, we have gone through several design and problem-solving cycles, and we have just started a pre-production run. The product, a unique, human-powered spinning balance/meditation device, will be made in Vermont and be built to last.

This year I began branching out into two new areas: selling my own product and designing a jobs/transportation program.

The new product is one that I designed and had manufactured in Vermont – a rain cap for the outdoor unit of a cold-climate mini split heat pump. Without the cap, rain can drip down the fan shroud and freeze into ice when it hits the cold exhaust air. This ice blocks the fan blades and can break them or burn out the motor when it stalls. The cap directs rain water away from the fan shroud, preventing these problems. It is currently available for Fujitsu, and I will add additional brands as there is demand.

On a totally different topic from engineering, I began research into a new Transportation Demand Management program that reduces Vehicle Miles Traveled by helping people find jobs close to home. It is called the Short Commute Network, and it works by facilitating job trades and transfers between people at different work sites to reduce commute distances. Long commutes cause significant greenhouse gas emissions, are an often overlooked source of workforce unreliability, and create stress and health problems for many people. The program I'm developing, Short Commute Network, aims to optimize the system so more people have short commutes. Through valuable mentorship from SCORE Vermont and a partnership with CATMA and Leadership Champlain, we are currently designing a pilot program to test the concept and gauge the impact.

If we haven't talked in a while, please let me know what you have been up to. I'd love to hear about what's new in your life. And if you have questions about anything I mentioned, just ask!

All the best,

Keith Epstein
Forecast LLC